GRUMMAN

planenews

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On the road. *In the middle of the night late last month, the X-29 travelled from Bethpage to Calverton. The X-29's first stop at Calverton is the fuel lab. Later, a host of tests will be performed, including an instrumentation end-to-end, emergency power unit test, engine run, and taxi test. It will leave Calverton in the fall for Edwards Air Force Base, Calif., where it will take its first flight.*

what's inside

Ted Debiak wins bronze medal at International Games for the Disabled. Read about it on page 4.

House hears Kline testimony on space commercialization. Story on page 5.

The big connection: maze of cables nears completion. See article on page 7.

Over 800 Grummanites join the retiree ranks. See complete list on pages 11 and 12.

Lucky Ten quality circle cuts down on real estate for filing. See story on page 6.

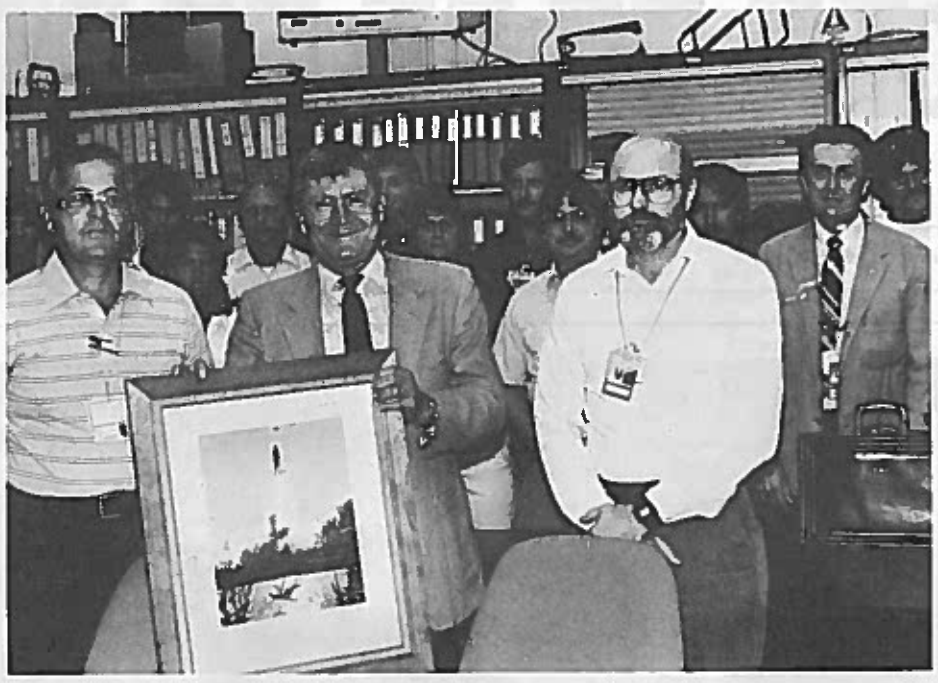
news briefs

Super launch

Grummanites in Control Room 3 (CR-3) of the Launch Control Center at Kennedy Space Center, Florida were recently honored for their support of STS 41C — the first Shuttle Launch from CR-3.

Grumman Technical Services, Inc. personnel assigned to CR-3 are responsible for the operational readiness of the Control Room. The team is comprised of systems coordinators, software systems engineers, technicians, hardware engineers, test conductors and management personnel.

Working together to achieve and maintain a high level of launch readiness, the team insures that required launch software is properly installed in the control room, all necessary data paths are connected, and the entire control room network of computers, peripherals, and support hardware is operational.



Super launch. *Grummanites who work in Control Room 3 (CR-3) at the Kennedy Space Center in Florida recently received a framed photograph of STS-41C — the first official launch from their area. Fred Haise, Grumman Technical Services President, presented the photo to the group in honor of its dedication in making the first launch completely successful. Pictured with CR-3 Grummanites are (L to R) George Best, lead test conductor; Haise; and Bill Wright, CR-3 supervisor.*

Givers of life

A special luncheon was held recently at the Linden Tree Restaurant in Bethpage to honor three Grummanites for outstanding blood donations.

By happenstance, all three — David Finkelstein, Gilbert Parachini, and Santo Stefania — work in various parts of the Integrated Logistics Support department. The three men received plaques of appreciation from Will Bischoff, 1984 chairman of the Grumman Blood Program and vice president-chief engineer for Grumman Aerospace.

David, an associate logistics analyst in ILS Supply Operations, was the champion giver; he's donated an amazing 15 gallons of blood since he first began giving regularly in 1941. At the time, he was a premed student at Long Island University in Brooklyn.

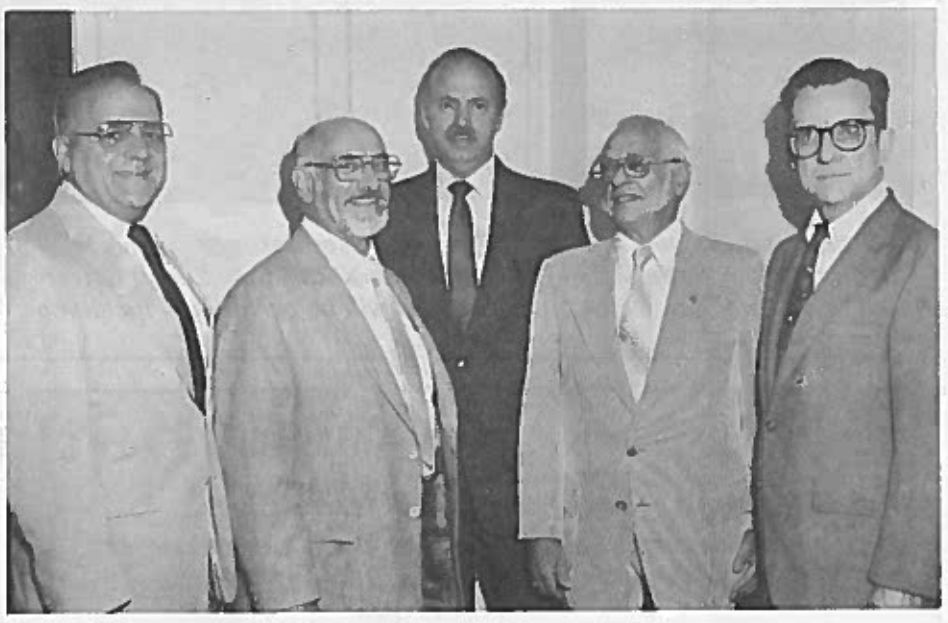
"It was a patriotic time," he recalled. "They needed donations during the war years. Since then, I've given blood five times a year." In addition to his most recent honors, David received an award from the American Blood Bank Association in 1971.

Santo began giving in 1958 and also became a five-times-a-year donor. That is the maximum frequency an individual can give blood.

"The blood bank made an appeal, and I found out it was painless and helpful. So I just kept donating," he said. Santo was honored for giving nine gallons over the years. He noted that he had never experienced a family emergency where blood was needed urgently, but said a few times, the blood bank had appealed for donors of his blood type — "B" positive — since it is one of the least common.

Gilbert, who was presented with an eight-gallon pin earlier this year by the Blood Program, has been a regular donor for over 35 years. He first gave when his cousin underwent a major operation. Gil and his brother were asked to donate.

Since then, Gil has been a request donor — which means Long Island Blood Services can call on him during emergencies and shortages. He also recently signed up as a pheresis donor — a special type of blood donation where platelets are removed from the donor's fresh blood and the blood is returned to the donor. This process takes one and one half to two hours.



Champions. *Gilbert Parachini (2nd L), Santo Stefania (C), and David Finkelstein (2nd R), all of Integrated Logistics Support, were honored recently for outstanding blood donations. They are flanked by Will Bischoff (L), vice president-chief engineer and '84 chairman of the Grumman Blood Program, and Harry Kline, vice president, Integrated Logistics Support.*

Part-time jobs available

Attention: summer employees. If you attend a Long Island college, you'd be interested to know that part-time positions are available at Grumman on a limited basis for general office cleaning.

Two shifts are being offered for a maximum of 20 hours per week. The first shift will be from 4 to 8 p.m.; the second will be from 8 p.m. to midnight.

If you are interested, contact Joseph Sousa on Ext. 52120 two weeks prior to the completion of your summer employment.

Personals

My wife and I wish to thank our friends, co-workers and ESO for their kind expressions of sympathy during the recent loss of my mother. Bernard Bernier

My family and I wish to express our sincere thanks to our friends at Grumman for their support, kindness and sympathy during the recent loss of our son Tom. The Glaser Family

My family and I wish to extend our gratitude to my friends, co-workers and ESO for their kind expressions of sympathy during the recent loss of my mother. Bruce Towell

My family and I wish to thank our friends, co-workers and ESO for their kind expressions of sympathy during the recent loss of my mother. Charles Howe

I would like to thank all of my friends and co-workers at Grumman for their kindness, prayers and generosity in support of the transplant fund established for my daughter Rhonda. Darilynne Saunders

We deeply appreciate your thoughtful expression of sympathy which was of the greatest comfort to us in our sorrow. Abraham Fernando and Family

The family of Jerry J. Swihun would like to gratefully acknowledge and express their heartfelt thanks to the Grumman Corporation and all of Jerry's many friends for their kind expressions of sympathy. Michael B. LaChiana

My family and I wish to express our sincere thanks and appreciation to my friends, co-workers and ESO for their expressions of sympathy during the recent loss of my father. George Scheuerlein

My family and I wish to extend our sincere thanks to my friends, co-workers and ESO for their kind expressions of sympathy during the recent loss of my father. Alfred J. Ellensohn

My family and I wish to express our sincere thanks and appreciation to my friends, co-workers and ESO for their kind expressions of sympathy during the recent loss of my mother. Ken Hubbard

(More on page 4)

High Strain Wing Program

Composite program advances state-of-art

Layup mechanics in Grumman's Milledgeville, Georgia composites manufacturing center and design engineers in Bethpage's Plant 25 have teamed up to work on the latest high-tech composite effort for future aircraft structures.

As one of the leaders in the field of composite aircraft-structure production, Grumman is currently pressing ahead on a special Naval Air Development Center (NADC) contract to design and manufacture a "high-strain" composite airplane wing.

The project is part of a developmental contract — amounting to just under $1 million — which follows two $100,000 NADC contracts for conceptual-design/trade study and experimental-design testing, initiated by Naval Air Systems Command and successfully completed by Grumman over the last several years.

Primary goal

Sam Dastin, program manager for the High-Strain Wing Program, says the primary goal of the current contract work is to design and produce a high strength composite wing with a strain level double that of current standard composite wings and to obtain an additional weight savings of some 20 percent.

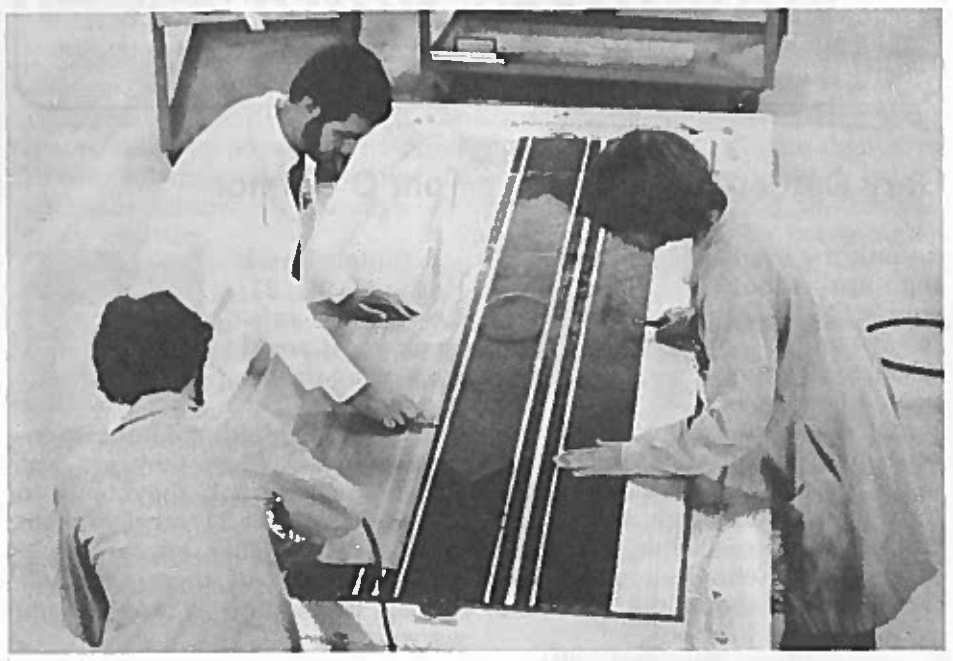
"In order to improve the performance of composites material structural parts — to increase weight savings and reduce production costs while assuring structural integrity — Grumman has undertaken the lead in this new development of composite design and manufacturing techniques. These advances will safely permit aircraft primary structures to operate at double the current standard load factors," he states.

'The High Strain Wing Program is one-of-a-kind.'

Dastin points out that the use of composite materials in the design and manufacturing of aircraft structures is "still a relatively new field that offers a great deal of potential. To tap that potential, however, will take a great deal of intense and often expensive research. The High Strain Wing Program is one-of-a-kind and puts Grumman at the leading edge of composite design and research for aircraft," he asserts.

The High Strain Wing Program is part of a "generic" composite wing optimization effort that will eventually offer applications in a variety of airframe designs. Project manager Joe Bruno notes that the actual production work that is currently going on in the Plant 66 layup room is being done as part of Grumman's proposed V/STOL subsonic Navy patrol aircraft wing.

Skin smoothing. *Plant 66 layup mechanics (L to R) Guilford Mauldin, Charles Mimbs, and Jane Bruw compact each of the 126 graphite/epoxy plies that form the composite top-skin of the high-strain wing subcomponent test box in order to smooth out any wrinkles or air pockets between the layers.*



Composite lay-up. *John Noack (top L), Plant 66 coordinator for the High-Strain Wing Program, points out the spar location for mechanics Charles Mimbs (L) and Guilford Mauldin (R) to lay up plies of graphite-glass/epoxy hybrid composite material to form the skin for the high strain wing subcomponent test box.*

"The development of a stronger, lighter composite constructed aircraft wing — in this case for our design 698 V/STOL — obviously offers a number of potential applications for other aircraft as well," says Bruno. One such example, he notes, might be in future derivations of the Grumman E-2 airframe.

Doing homework

The High-Strain Wing Program has been an ongoing developmental effort for several years now, says Bruno. He points to personnel in Plant 12 who had previously manufactured test elements of the composite wing, in order to validate design theories developed earlier in the program.

Currently, layup mechanics in Plant 66 are applying some 126 plies of graphite-glass/epoxy hybrid material on a mold surface — smoothing each layer to remove wrinkles and air pockets. The plies are then placed in high-heat/high-pressure autoclaves where they are "cured" or laminated together to form the super-tough composite skins.

John Noack, Plant 66 coordinator for the High-Strain Wing Program, says the Grumman Milledgeville plant is "well suited" for the task of fabricating detail parts for the composite high-strain wings. "We have the right personnel and the advanced technological know-how here to successfully carry out the manufacturing end of the High-Strain Wing design program."

Noack says that typically, standard composite aircraft parts are run at limited strain or "stretch" levels. "What we are trying to achieve in the high-strain program is to push the state-of-the-art farther ahead, while still meeting and hopefully exceeding other established criteria such as costs and durability for aircraft composite parts production," he comments.

Plant 66 has been assigned the task of fabricating all the detail parts for one high strain wing subcomponent test box. Product Development Operations Center (PDOC) in Plant 5 will assemble the detail composite parts for the subcomponent box. It will then be sent to NADC in Warminster, Pennsylvania, to undergo extensive validation tests to prove out the program's engineering designs.

'The importance of composite materials . . . can not be overstated.'

"The importance of composite materials in future airframe design and manufacturing cannot be overstated," stressed Dastin. "And with programs like the High-Strain Wing, Grumman will continue to be a leader in the field of composite structures and materials."

what do you think?

We travelled to Picnic in the Park at McKay Field recently to ask fellow Grummanites what they thought of the recent moves to raise the national drinking age to 21. What do you think? (Photos by Bob Settles)

Gary Calderone

I think the drinking age should stay at 19. I feel it is unfair to penalize all young people because of those who drive drunk. There are other ways to prevent drunk driving, for example: taking away someone's license for a specified number of years. People, especially those in high school, should be better educated about the influence alcohol has on the body.

Paul Rumer

It's alright with me to raise the drinking age. But if the drinking age is 21, then every legal age should be 21. . . for example, drivers license, registration for the draft, voting, etc. The laws should be consistent with each other. You can go fight for your country, but you can't have a drink. . . some laws are conflicting.

Tom O'Connor

I definitely think it should be 21, for highway safety alone. It could stop many deaths and injuries. The 18 and 19 year-olds are not responsible enough. When they are just out of high school, they tend to feel their oats. At 21, most of them can handle it. They are more mature and most of them use their heads. That's how it was for me anyway.

Jane Samuelsen

It's ridiculous to raise the drinking age to 21. I feel that if any citizen of the United States has to sign up for the draft, go to war, fight for our country, possibly even die for our country, he or she should be able to have a drink. I don't see why the drinking age should be increased.

Marty Skurla

There are two reasons why I think the drinking age should be 21. The first being that it will save lives. By not allowing younger people to drink, the number of drunk driving accidents will be reduced. The second reason is that the federal government will impose penalties on those states that don't raise the drinking age. They intend to cut back on aid to state highways. And with the condition of some roads in New York, the state needs all the help it can get.

Norman Facey

It should be moved to 21. I feel people are more responsible at this age, much more so than they were in high school. Nineteen year-olds are not always responsible; I know I was a little rowdy at that age. Young people have many reasons why they feel they should be able to drink, but statistics prove that many accidents are caused by young kids driving while intoxicated. It can save lives.

More personals

Our sincere thanks to all of Fred's co-workers and friends throughout Grumman. Your many cards and calls during his long illness kept his morale high and your expressions of sympathy since his death are deeply appreciated. The Bolda Family

My family and I wish to thank our friends and co-workers for their sincere prayers and condolences extended to us during the recent loss of my husband. Marilyn Duffy

My family and I want to extend our thanks and appreciation to my friends, co-workers and ESO for their support, understanding and kind expressions of sympathy during the recent loss of my father. Matthew Pupilla Jr.

We wish to thank all our friends and co-workers for their support and sympathy during the long illness and subsequent loss of my father. Robin Frenzel and Family

We would like to thank all of my father Edward's co-workers who have been so kind and helpful to us. Martin Horowitz and Family

My family and I wish to thank all our wonderful friends for their kindness, understanding and sympathy during the recent loss of my father. Bob Fitzgerald

My daughter and I wish to express our sincere thanks to our friends at Grumman for their kind expressions of sympathy during the recent loss of my husband. May God bless each one of you. Gloria Fiore

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people

Ted takes the bronze

Ted Debiak

Ted Debiak, a research scientist in Plant 26, captured a bronze medal for the U.S. team at the International Games for the Disabled held in Uniondale, L.I. Competing in the table tennis ML-5 category — against the least impaired athletes and therefore the toughest competition — Ted teamed with Marcel Monastarial of White Plains, N.Y. to take third place overall.

Ted, who lost his left arm in Vietnam in 1967, says he was "thrilled" to win a bronze at the games against very strong international competition. "I've been playing table tennis since I was very young and I enjoy the competition, whether it be in a major tournament like the International Games for the Disabled, or a Grumman tournament," he comments.

Ted teamed with Penny Baldassare to win first place in the 1984 Grumman table tennis tournament and is a former Grumman champion of the B-division who has moved up to A-division competition this year.

At the International Games for the Disabled, Ted and his partner Marcel competed in the Davis Cup-style team play tournament in which each team member plays two games of singles and one of doubles in best-of-five-match play. Ted and Marcel made short work of the Australian table tennis team, beating them in three straight to move up to the semi-finals. "In the semis we faced a team from China that turned out to be weaker than we had expected considering the fact that the Chinese have some of the top able-bodied table tennis players in the world. Everytime someone hears that we beat the Chinese team they seem very impressed though — I guess it is something to be proud of," says Ted.

Ted and Marcel went on to beat the Yugoslavian team in doubles but dropped their singles matches enabling the Yugoslavians to take the silver while the German team won the gold medal.

Ted attributes his table tennis achievements to hours of practice, at lunchtime in Plant 28A, as well as in the Grumman tournaments. He also keeps up a regular running schedule to give him added strength and endurance. "It's easier to concentrate on your game when you are in good shape," he notes.

The medal winner says that he became interested in participating in the Games for the Disabled after competing in the National Tournament in 1983. "I had been officiating in the Tri-State Wheelchair Table Tennis tourney at Nassau Community College for several years when the U.S. Amputee Athletic Association contacted me about competing in the National Tournament in Tennessee." Ted took the national championship at the Tennessee tourament and began looking forward to the International games in 1984. "This year I took the silver and Marcel won the gold at the National Tournament, so we were a natural team for the International Games," Ted says.

Besides the thrill of winning the bronze medal at the International Games, Ted says he greatly enjoyed meeting athletes from all over the world. "The athletes and support people at the Games were simply wonderful. I met several people that I am really looking forward to seeing again, probably four years from now at the Games in South Korea. I'll keep practicing until then and maybe we can come home with the gold next time."

Unit values

Unit values for the Grumman Employee Investment Plan as of May 31, 1984 are (compared to April 30, 1984 values):

Equity Fund
2.201 down from 2.94
Fixed Income Fund
3.509 down from 3.574
Guaranteed Income Fund
1.819 up from 1.803
Company Stock Fund
$23.25 down from $24.56

Straightening it out. *Diana Starr earned $500 for designing a special block that guides paper through the IBM Display Writer printer.*

Project Sterling

Suggesters continue to reap big bucks in '84

By suggesting quicker and better ways to do their jobs, 51 Grummanites helped save the company an estimated $426,359. Project Sterling award winners collected $7,605 for their cost-saving employee suggestions last month.

Top suggester was Armand Festa, an equipment operator in Plant 2. He submitted a profitable suggestion that earned him $1,200. Armand recommended a new procedure for removing lead bases from the dies in the Drop Hammer Shop. By lifting the die and base on a fork lift, the die is dropped on a fulcrum point which distorts the base and allows the die to "pop" out.

This was Armand's second suggestion. His idea will save the company an estimated $24,840 in the first year alone.

Straightening it out

Diana Starr, a unit leader in Plant 2, was awarded $500 for her suggestion to fabricate a block used with the IBM Displaywriter, a word processing machine. The block assists 14x8.5 inch paper through the machine by keeping it straight. "It's a sophisticated piece of equipment, and feeding the Displaywriter printer manually was ridiculous. It drove me crazy," says Diana.

So Diana went home and asked her husband to make a model of a guiding block. "I gave him the dimensions and he made the first model for me," says the Project Sterling winner. The revised model was made by the Grumman shop, and is now being used by many IBM Displaywriter operators. First year savings from this idea total $91,874.

With her award money, Diana is going to send her daughter to summer camp at Hofstra University.

A worthy bid

Frank Wulforst of Publications Control in Plant 15 won $435 for submitting a two-part suggestion. Frank suggested that sellers supply a second bid cost on extended delivery dates. This would result in a lower price on overall deliveries. The second part of his suggestion requires that sellers quote a total page price that includes stripping. Each strip used to bear a second cost. His ideas net the company first year savings of $43,514.

As for his cash award, Frank says, "It's already spent. I'm using it for home improvements."

Some of the other Project Sterling award winners were:

$410 — Arthur Martin and Michelle Sabin, Pl. 40. **$380** — Frank Laura, Pl. 43. **$365** — Michael Caruso, Pl. 2. **$325** — Salvatore Brucato, Pl. 44. **$310** — Ronald Johns, Pl. 8. **$300** — Daniel Callery, Pl. 35.

$280 — Martin Ott, Pl. 4 and Peter Chaldaris, Pl. 2. **$245** — Brian Hawkins, Pl. 7. **$235** — Charles Randazzo, Pl. 5. **$210** — Domenic Capobianco, Pl. 7. **$200** — Judith Coffey, Pl. 35; and Mario Maranzano, Pl. 35. **$185** — James Camerford, Pl. 106. **$165** — Veronica Clark, Pl. 30. **$150** — Francis Geary, Pl. 3. **$140** — John Robbins, Pl. 30. **$135** — Charles Hedler, Pl. 43. **$130** — Robert Metz, Pl. 3. **$110** — Adam Wolynski and Joseph Morelli, Pl. 2. **$100** — Robert Kappenburg of Pl. 30 and Robert Kelbac, Pl. 30; Saverio Fiorentino, Pl. 2; Louis Lionetti, Pl. 40.

Space commercialization

House subcommittee hears Kline testimony

Dick Kline, Grumman Aerospace's director of Space Station Programs, recently testified on space commercialization before a House subcommittee investigating alternate means of funding the Space Shuttle.

Kline called upon NASA (National Aeronautics and Space Administration) to take a course of actions that would develop "new and broadly diverse high technology commercial enterprises to significantly stimulate the American economy." He narrowed the term "space commercialization" to mean the development of new products that capitalize on the very low gravity environment found in earth's orbit.

"The use of low-gravity experimentation may contribute to new and better products manufactured in space, or provide an understanding of processes which eventually will be used to produce materials and goods on the ground," he testified. "This, I believe, holds great promise for the United States industry and for industrialists and entrepreneurs throughout the world. The question will be, who gets there first and really capitalizes on these opportunities — the U.S. or other interests?"

Kline noted that Grumman has been involved in the development of space manufacturing technology for a decade, through both corporate and NASA funding. He also pointed to Grumman's two-year-old awareness program, aimed at non-aerospace companies, as evidence of industry interest in space commercialization. Of 18 major companies contacted so far, 13 have indicated interest in considering experiments in space processing, and two are developing proposals for near-term experiments.

Bigger outlay

Kline made a number of recommendations of how NASA could better accomplish these goals. The recommendations, he said, would represent a budget increase of about $40 million.

First, he called for the establishment of a central, high-level NASA agency for space commercialization. He also called upon NASA to provide readier access to shuttle flights and increase user confidence. The latter, he said, would be accomplished by making it clear that the shuttle schedule will eventually be modeled after existing airlines.

Kline said initial front-end costs should be lowered, not raised, as has been proposed by some members of Congress. He recommended that NASA provide "seed money" for development expenses, continued reduced-rate shuttle flights, reduced costs of integrating experiment equipment into the shuttle, and an extension, to the commercial production point, of the exclusivity period.

Kline also recommended that NASA expand the research database and undertake its own awareness campaign on space commercialization. Both would be served by the establishment of industry-university-government "Low-g Centers of Excellence."

Competition

The U.S. has competition in space commercialization, he warned the subcommittee. Europe and Japan have vigorous projects under way, and the Russians are reportedly working on space manufacturing on board the Salyut Manned Space Station.

"With a budget of $40 million per year, we have the opportunity to lay the foundation for an emerging new industry and accelerate our technologies in the face of foreign competition," he said. "As this policy is undertaken, we see the need for the establishment of a permanent manned space station. It would send a powerful message to this country's industrial community that commercial activity in space can be planned for and undertaken on a major scale.

"We must remain preeminent in space — both commercially and operationally as well as scientifically. The time is now — I say we should go for it!"

obituaries

NATALE J. FRANZESE of Supplier Control, Plant 30, died June 6 at the age of 63. He had been with the company since 1964 and resided at 25 Lawrence Hill Rd., Huntington.

FRANCIS TROBIANO of Production Control, Plant 3, died June 10 at the age of 58. He had been with the company since 1949 and resided at 111 Central Ave., Garden City Park.

JAMES S. KING of Subsystem Reliability, Plant 40, died June 14 at the age of 66. He had been with the company since 1963 and resided at 7 Honeysuckle Lane, Kings Park.

PATRICK J. PERRONE of EF-111 DLTS/TCTOS-DA, Plant 6, died June 27 at the age of 35. He had been with the company since 1973 and resided at 525 Rinerleigh Ave. B17, Riverhead.

Quality Circle update

Lucky Ten's hard work pays off

On the very first project it ever attempted, the "Lucky Ten," a Quality Circle in ILS Supply Operations, got very lucky.

That is, lucky in the sense that out of 35 problem areas identified during the Ten's initial brainstorming sessions, the group zeroed in on one whose solution is both feasible and extremely cost effective. The proposed project — a central filing system for customer orders to be used jointly by ILS Supply Ops and Contracts — will save the company about $300,000 per year. It was recently approved by management, and will be implemented within the next six months.

The project, however, wasn't wrought by luck but by hard work — a lot of brainpower and nitty-gritty research had to be invested by circle members.

Recalls Bob Kaminski, training coordinator for ILS Supply Ops and facilitator of the Lucky Ten: "We had to work on a problem that was meaningful and could be solved in a reasonable amount of time. ILS Supply Ops had existed in this area for eons. About two months before the circle was started, Support Contracts moved into the area. As part of the circle's brainstorming someone said, 'say, they're using the same information we are and we have 26 file cabinets that we didn't have before'."

A lot of real estate

Having two separate filing systems, the circle decided, took up a lot of real estate and contributed to a lack of file accountability. Also, both departments sent similar records to the archives, taking up more space there.

The new plan calls for the purchase of 12 lateral file cabinets, hiring a person to maintain the file area, and instituting a floor plan that better utilizes limited space. Better file accountability is another benefit. The $300,000 per-year savings is based on the elimination of 15 present file cabinets, costing $20,000 each annually to maintain.

Cost cutting idea

The group's research, involving government documents and consultation with Grumman's own Facilities specialists, backed this up. Kaminski adds that the figure doesn't include the cost savings to be realized from sending one-half fewer records to Archival storage. And the only costs are for the 12 new cabinets, totalling about $6,000, according to the circle, and the file person's salary.

The Lucky Ten isn't the only successful Quality Circle in ILS Supply Ops — the "Responding Achievers" from the Technical Requirements area has also begun implementing a file consolidation proposal. "The two suggestions dovetailed quite nicely and were presented to management together," Kaminski notes.

The people in the circle were all novices to the Quality Circle approach. "The proposal worked out quite well for the group's first project, really," says Kaminski. "This just goes to show you what Quality Circles are capable of accomplishing."

Brainstorm. *The "Lucky Ten" tackles a problem. Shown, L-R: Diane DeStefano, Frank Sanfilippo, Jeri Kratina, Lucy Calandra, Thomas Scully, Barbara DeFranco, Daniel Carroll, Joseph Pampinella, William Yearsley, John Uzar, and Peter Morley.*

Air Show on tap

On September 15 and 16, the Antique Airplane Club of Greater New York will hold its 22nd Annual Fly-in for antiques, home-built, classic and ex-military aircraft at Brookhaven Airport, Mastic, Long Island. Trophies will be awarded. For additional information, contact John Schlie, (516) 957-9145.

More personals

To the Officers, General Managers and Directors of Grumman Aerospace Corporation, the Education with Industry Advisors, and all Grumman employees: We wish to express our sincere appreciation for all you have done to make our tour at Grumman such a worthwhile learning experience and for making us feel a part of the "Grumman Family". A special thanks for insuring that our year at Grumman was filled with quality presentations and rewarding work assignments. Captain Mike Esher & Captain Jim Pennock EWI 1983-1984

My family and I wish to thank our friends and co-workers at Grumman for their support and sympathy during the recent loss of my mother. Your kindness was much appreciated. John Sullivan

My family and I wish to express our sincere thanks and appreciation to our friends, co-workers and ESO for their kind expressions of sympathy during the recent loss of my father. Rosemary Bain

My family and I deeply appreciated the outpouring of warm support received from the Grumman family during the recent loss of my father. Vin Padavano

We would like to express to our Grumman friends our appreciation for the kindness and support given to us following the loss of our son. Thank you for all the cards, letters and donations sent in memory of Paul. Julius Cohen and Family

Enjoy the outdoors? Come join the club

With the summer season in full swing, many Grummanites are looking forward to sun-filled vacations — and what better way to spend a vacation than on a fun-filled family camping trip? This year the Grumman Family Camping Club is celebrating its 20th anniversary and as always its theme is family fun, rest and relaxation for everyone.

Club president Al Hanes says, "This year, just like the past 20 years of the club's existence, our emphasis is on the family — both the Grumman family and the individual Grummanite's families. We try to get everyone involved in the fun of camping out and experiencing nature and the natural camaraderie of campers."

The typical camping season for the club goes from April through October with about 10 to 12 major campouts arranged, one of which is an annual nine-day camper's rally. This year's rally will take place in the White Mountains of New Hampshire.

In addition to the longer outings upstate and out-of-state, the Camper's Club also stages several trips to the state and county parks in Nassau and Suffolk on Long Island, from Hewlett Bay Park to Greenpoint and Montauk Point.

All campers are invited to sit around a group campfire and exchange the tall stories that are part of all camping lore, while enjoying communal coffee and cake and roasted marshmallows. Pot-luck dinners are also common on the outings with families often throwing spontaneous wine-and-cheese parties and group barbeques.

Softball games, horseshoe tournaments, bocce, and other sports are regular events at the campouts, as are "Chinese auctions" and all sorts of card games. "But our number one activity on these camping trips," says Hanes, "is no activity at all — just enjoying the rest and relaxation of being in the wilderness with your family and Grumman friends."

Grumman Family Campers Club dues are $15 per year ($20 for the first year) and entitle members to receive a membership card that can be used to obtain discounts at local camping supply stores.

At each campout, members have the privilege of inviting a nonmember family along as their guests. Club activities during the winter months include an annual Christmas party, a family bowling party and a dinnerdance. Further information on the Grumman Family Campers club and dates for future campouts can be obtained by contacting Al Hanes at Ext. 391-6512 (MS: C08-110) or George Starr, Ext. 58613 (MS: A19-02).

Underground cable maze nears completion

Since the warmer weather began, many Grummanites at Bethpage may have been puzzled by all the craters and trenches that have sprung up quickly, then disappeared, of late. It's really no big mystery: new conduits have been installed underground for Grumman's electrical, telephone, and computer system cables, and the lines have been run between plants, across the runway, and even underneath the Long Island Rail Road tracks.

In addition, a new electrical substation is being installed adjacent to Plant 2, which will provide Grumman's Bethpage complex with 33 percent more power. This will support the new facilities now under construction, as well as plant modernization. The substation will be activated over the Labor Day weekend.

"The electrical load has increased four-fold in the north complex area (that north of the Long Island Rail Road tracks) in the last two years," says Tom Cunniffe, director of Facilities Engineering. "It will increase even further as the result of the expanded Grumman Headquarters building, the Plant 14 addition, Plant 26, which will be doubled in size, and Plant 31."

The massive undertaking represents an approximately $7-million expenditure. It's taking place at the same time that Grumman-Bethpage's roads and storm water drainage systems are being revamped. New roads and parking lots are being added, existing ones are being rerouted, and several unnecessary drainage sumps have been filled.

In addition to aesthetics, the underground conduits will provide safety from the elements — they are fabricated of polyvinyl chloride encased in concrete, ensuring durability for years to come. Also, the underground wires will be more secure, since it will be much more difficult for intruders to tap into telephone and computer communications lines. The cables are already shielded and grounded for security.

The conduit system has been designed to keep up with future growth — and to make adding new cables fairly simple. Several "cable galleries" have been built at various hubs around Bethpage. They are literally very large manholes, providing access to the underground wires for repairs or expansion. New cables need only be threaded from plant to plant by crews working in these galleries and in manholes — plenty of spare conduits have been laid in addition to ones carrying existing cables.

Ed Smiddy, chief engineer, Facilities Engineering, said the Facilities team paid particular attention to the recent proliferation of GEMS (Grumman Engineering Management System) and other computer terminals in designing a growth oriented cable matrix.

"We have been dealing closely with Information Resources Management . . . we've taken their requirements and added to them," he says. "We've put down a lot of spare conduits. So, we should be pretty well set for the future as far as accommodating their communications needs."

The new electrical substation will rest on a concrete pad with a cable gallery underneath connecting it to the Bethpage conduit matrix. It will be inside a secure barb-wired enclosure.

Grumman purchases its electrical power — most of it, at least — from Long Island Lighting Company in 66,000-volt quantities. It's cheaper that way, says Smiddy. In order for it to be used, it must be transformed at the substation to units of wattage of 13,800 volts.

This power is distributed to plants, which in turn transform it to 480 volts or 120/208 volts in order to run the machinery, lighting, and other systems at Grumman's Bethpage facilities. A lower voltage substation, much smaller in size than the one being installed and the existing high-voltage substation, will be slowly phased out over the next few years.

Since the substation will be activated sometime during the Labor Day weekend, power to the Bethpage complex will be shut off for that entire period. The shutdown is necessary, Smiddy says, to let the work crew do its job.

A-mazing progress. *This is what much of Grumman's Bethpage complex looked like until a short time ago. Virtually all of the Bethpage electrical, telephone, and data communications lines have been installed underground, in a maze of cables like those shown above. Not only will the underground system make the above-ground facilities more attractive — it will also provide added security and long life. The project is about 90 percent complete.*

The place to be

A beautiful sunny afternoon, good tunes over the radio, volleyball and lots of smiling faces set the stage for the annual Grumman summer student employee picnic.

The picnic brought over 180 students together for fun and games, Tuesday, June 26 at McKay Field. Summer employee Anne Kliene, who coordinated the picnic said, "It's a great chance for the summer people to meet each other. It's a feeling of togetherness."

W.F. Muller

R.W. Lyon

J.C. Sherry

S.V. Mazur

H.G. Kipybida

M. DiNoia

M.J. Sheehan

W.H. Kovarik

S. Bank

P. DiMarzo

R.J. Koster

R.F. Mehl

J.W. Carter

A.H. Badstuebner

A. London

W.J. Hamilton

G.R. Peck

H. Weiss

service milestones

Richard W. Corrigan, Mfg. Plann. (66)
Norman E. Reid, Dassault (77)
Paul J. Couluris, Grumman Int'l. (111)
Victor L. Peckenschneider, ILS Tech. Writing (201)
Herman C. Leuther, Pwr. Plt. Des. (110)
Peter Rosato, Soft. Anal. (268)
William R. Luneburg Jr., Qual. Engr. (272)

40

William Wright Jr., Prod. Plt. Mgt. (2)
Nathaniel W. Schnurman, Inst. Plann. & Cont. (5)

35

Kenneth J. Smith, Final Assy. (1)
Eugene Watson, Prod. Cont. (1)
Frank Salentino, Assy. Methods (1)
John Duggan, Plt. Serv. (1)
James J. Mulligan Jr., Prog. Mgt. (1)
Wallace G. Schulein, Sub-Assy Major (2)
John G. Poli Jr., Matl. Supt. Cont. (2)
Harold J. Fowler, Prod. Cont. Maj. Assy. (2)
William J. Devine, Mfg. Sys/Doc. (2)
James L. Cunningham, Repair Cont. (2)
Joseph J. Pontorno Jr., Cent. Storage & Ret. (2)
Albert R. Grenci, Jigs & Fix. (2)
Joseph M. Oakes Jr., Indus. Safety (2)
Felix A. Zorskis, Ctr. Sect. Final (3)
John G. Huber, Mfg. Mgmt. & Staff (3)
John F. Suss, Qual. Eng. Prod. Supt. (3)
Edward C. Bennett, Static Test (5)
Alexander J. Zuk, Supt. Equip. (5)
Charles E. Frank, Prod. Dev. Ctr. (5)
Henry G. Bramwell, Inst. Test (6)
Ernest S. Randall, Facility (6)
Robert Sagl, Final Assy. Insp. (6)
Herbert R. Schmidt, Prod. Deputy & St. Foreman (7)
Frank Kowalesky Jr., Matl. Ops. (7)
Salvatore R. Rizzo, Tech. Reqmt. (9)
Thomas J. Lashinsky, Traffic (17)
Thomas J. Longo, Conf. Data Mgmt. (25)
Scott Wallace, Employment (28)
William Schoppmeyer, Sub-Cont. Surv. (30)
Stuart G. Harvie, Eng. Sci. & Tech. Mgmt. (35)
James J. Dunn, Ops. Mgmt. (66)
Ludwig Blum Jr., Prod. Mgmt. (77)
Richard P. Maher, Mf. Res. Mgt. (105)
William J. Johnson, Fld. Ops. (294)
Harvey E. Abrams, Sup. Sys. (463)

30

Robert G. Albertson, Prototype (1)
Joseph M. DeSanto, Fus. Assy. (1)
Joseph W. Moldashel Jr., Prog. Plann. Cont. & Budg. (1)
George H. Fincken, Mach. Struct. & Proto. (2)
Benjamin Telesca, Hyd. (2)
James Pope Jr., Cap. Mont. & Ctl. (2)
Gerald J. Barbieri, Cap. Mont. & Ctl. (2)
Joseph F. Ivers, Mft. Sch. (2)
Robert J. Crossley, Assy. (3)
Rudolph C. Ramcke, Mach. Oper. Tech. Serv. (3)
Martin C. Beltrami, Prod. Cont. (3)
Philip Fischer Jr., Maint. (3)
Raymond T. Rice, Struct. Test (5)
Richard F. Alfred, Maint. (6)
Glenn R. Bradley, Maint. (6)
Peter S. Salinder, EF-111 Struct. Mod. (6)
Arthur E. Veprovsky, Trans. Equip. Maint. (7)
Donald R. Snell, Elect. Fab. (7)
Dominic R. Yannucci, Maint. (12)
Robert Sokolowski, ILS Tech. Writing (15)
Graham M. Serr, Plt. Prot. (18)
Charles E. Squires Jr., Dynamics (35)
Robert Keenan, Anal. Hyd. Comp. (35)
Louis R. Sclafani, Mech. Struct. & Assy (43)
Francis A. D'Amico, Mech. Det. (43)
Philip J. Lagan, Matl. Mgmt. (43)
Charles F. Broadway, Prod. Supv. (44)

25

Wilbert F. Muller, Opt. Display Nav. (1)
Robert W. Lyon, Sys. Dev. & Integ. Mgmt. (1)
James C. Sherry, Sub. Assy. (2)
Stanley V. Mazur, Bus. Mgmt. (2)
Henry G. Kipybida, Prod. Cont. (2)
Raymond Plawski, Prod. Rel. & Anal. (2)
Michael DiNoia, Mfg. Bus. Mgmt. (2)
Michael J. Sheehan, Pub. Eng. (2)
John J. Koberlein, Mech. Proc. Engr. (2)
William H. Kovarik, Maint. (2)
Steven Bank, M & ME Mgmt. (2)
Pasquale DiMarzo, Qual. Mgmt. (2)
Robert J. Koster, Conv. Mach. (3)
Robert F. Mehl, Final Assy. (3)
Joseph W. Carter, Mach. Ops. Bus. (3)
Arthur Badstuebner, Flt. Ops. (4)
Donald G. Myers, Inst. Test (5)
Kenneth G. Wendel, Model Shop (5)
Arnold London, Adv. Matl. & Proc. (5)
William J. Hamilton, Jigs, Det. & Sub. Assy. (6)
Vincent J. Verteramo, Trans. Ops. (6)
George R. Peck, Soft. Apl. (7)
Harvey Weiss, Corp. Inst. (7)
Robert W. Korth, Flt. Av. (8)
Eugene E. Stapleton, Flt. Av. (8)
William H. Lyons, Conf. Data Mgmt. (9)
George E. Mirecki, Qual. Lab. (9)
Joseph Nardi, Templates (11)
Earl W. Freidank, Maint. (12)
Edward Lynch, Maint. (12)
Joseph Gervasio, Maint. (12)
Robert H. Anderson, Metallurgical Engr. (12)
Robert E. Freyer, Adv. Matl. & Proc. (12)
Vincent C. Saputo, ILS Tech. Writing (15)
Walter H. Steigele, Trans. Equip. (20)
Joseph S. Kozlowski, Operations (25)
Raymond F. Lazar, Reqts. Plann. (30)
William F. Quirein, Cust. Supply Mgt. (30)
Walter Kapps, Tech. Reqmts. (30)
Robert P. Robinson, ILS Comm. Cont. (30)
Walter W. Hock, Pwr. Plt. Des. (35)
John R. Mohlenhoff, Elect. Box (43)
Richard J. Goedtel, Invent. Mgmt. (44)
William G. Connors, Facilities (66)
Richard McGlade, Invent. Cont. (106)
Lawrence A. Powers, Prod. Progs. (106)

20

Thomas Miller, Sub-Assy. Maj. (1)
Roy E. Schauer, Mfg. Sch. (1)
Joseph F. De Cesare Jr., ILS Equip. Des. Eng. (1)
Harvey Glick, Environ. Cont. Des. (1)
Sylvester A. Rocchio, Elect. Equip. Des. (1)
Sam Longo, Mech. Insp. (1)
Adam B. Kaczur, Controls (2)
Joseph F. Cinquemani, Fus. Assy. (2)
Edwin C. Duncan Jr., Bus. Mgmt. & Admin. (2)
Eileen J. Trowbridge, Bus. Mgmt. & Admin. (2)
Rita V. Hafner, Prod. Sup. (2)
Henry H. Gerkens, Prod. Sup. (2)
John E. Oest, Jigs & Fix. (2)
John E. Luttinger, Templates (2)
Thomas Bamundo, Cent. Storage (2)
Filomena Rainone, Mfg. Prod. Mgmt. (2)
Julius R. Marcucci, Conv. Mech. (3)
Ralph A. Acquaro, Conv. Mech. (3)
Frank Guenther, Honeycomb Core Det. (3)
Leonard A. Anderson Jr., Honeycomb Core Det. (3)
William E. Staab, Prod. Cont. Parts Cont. (3)
William T. Conklin, Q.C. Lab (3)
Adrian N. Hersey, Final Assy. Struct. (4)
Patrick A. McHugh, Corp. Inst. Sys. (4)
Roseanne Maglione, Financial Ops. (5)
Thomas J. Carpenter, Adv. Energy (5)
Mary W. Roy, Corp. Plann. Cont. & Budg. (5)
Edward G. Branch, Maint. (6)
Leland E. Young, Time Card Cont. (6)
Richard G. Bressler, A6/EA6B Sys. Test (6)
William Worth, EF-111 Prog. (6)
George Mujsce, EF-111 Sys. Test (6)
Raymond C. Pinter, F-14 Join Fwd. to Ctr. (6)
Leonard J. Mager, Support (6)
Raymond Fischer, Jigs, Details & Sub Assy. (6)
Carl Rissland, Elect. Prd. Supt. (6)
Robert J. Murray, Corp. Inst. Sys. (7)
Richard H. St. Denis, Avionics Dev. (7)
Ethel L. Plenty, ILS Sect. Serv. (9)
Henry J. Stutzenstein, Maint. (12)
Edward M. Peterson, Hyd. (14)

J.S. Koziowski

R.F. Lazar

W.F. Quirein

W. Kapps

R.P. Robinson

W.W. Hock

J.R. Mohlenhoff

R. Goedtel

W.G. Connors

J. Nardi

E.W. Freidank

R.H. Anderson

R.E. Freyer

V.C. Saputo

R.J. McGlade

W.H. Steigele

Edward J. Stenchever, Elect. Des. & Dev. (14)
Edward J. Franits, Elect/Mech Des. (14)
James A. Sweeney, Trans. Ops. (20)
Francis S. Carl, Whse. (21)
Andree F. Fogel, Cust. Supply Mgmt. (25)
James F. Sheehan Jr., Envir. Cont. Des. (25)
Josephine Buscarino, Benefits (28)
William F. Schneider, Forms Cont. (28)
Martin M. Myles, Cust. Supply Mgmt. (30)
Ronald Glass, Food Serv. (30)
Vincent Maiorana, Doc. Process (30)
Theodore H. Weber, Sup. Cont. (30)
George B. Heaslip, Eng. Admin. Ops. (35)
Theodore H. Weber, Sup. Cont. (30)
George B. Heaslip, Eng. Admin. Ops (35)
Edwin H. Binder, PPO-A6 & EW Prog. (40)
Joseph J. Stalzer, Mil & Space (40)
Louis Lengyel, Cust. Supply Mgmt. (40)
Frederick J. Dick. Pwr. Plt. Des. (40)
Carl J. Cassie, Subsystem Rel. (40)
Silvo R. Forte, Comp. Arch. (40)
Walter J. Murphy, ATE Test & Repair (43)
William H. Frazier, Prod. Cont. (43)
Joseph T. Ryan, Meth. Eng. G.S.E. (43)
Fred J. Petruchik, Reqmt Plan. (43)
Michael A. Ventura, Insp. Elect. (43)
Gordon J. Knight, Avion. Purch. (44)
Robert P. Pizzo, Avion. Purch. (44)
George J. Ciurleo, Invent. Mgt. (44)
Russell T. Ewers Jr., Tool Des. (66)
William J. Meyer, Support (88)
Edward A. Stroud, ILS Prog. Mgmt. (106)
Michael T. Hearney, ILS Elect. Pkg. (106)
Lester G. Fieldsa, ILS Digital TPS. Eng. (110)
John J. O'Connell, ILS Equip. Des. Eng. (110)
Donald S. Stone, Sys. Dev. & Integ. Proj. Mgmt. (110)
Frederick C. Fahner, Prog. Contracts (110)
Joseph P. DeRosa, Grumman Corp. (111)

15

Anthony Caputi, ILS Comm. Control (1)
Frederick C. Precht, Qual. Eng. (1)
Donna M. Warnat, Prog. Plan. Cont. & Budg. (1)
Annetta Branch, Assemblies (3)
Emory L. Philp, Join & Mid. Mod. Instl. (3)
Thomas S. Emberton, ILS Ops. Supt. (4)
Roger L. Ferguson, Flt. Crews (7)
Kenneth J. Yunger, FTT Perf. & Propul. (7)
James D. Dinkel, FTT Perf. & Propul. (7)
Eugene J. Bundas, Propul. & Fluid Sys. (7)
Evelyn M. Terry, Sect. Serv. (7)
Philip Hershkowitz, Radar (9)
Theodore Jones, Conf. Data Mgmt. (9)
Robert Rizzardi, ILS Ops. Supt. (25)
Stanley Wong, Marketing (25)
Peter P. Jurich, Matl. Mgmt. (30)
Delores E. McCall, FAC Admin. (30)
Michael W. Slack, Fluid Dyn. (35)
Paul W. Berg, Operations (35)
Dorothy J. Smith, ILS Sect. Serv. (40)
Paul J. Giambalvo, Mfg. Tech. (43)
Charles P. Klahne, Mach/Tool Shop (77)

E.E. Stapleton

W.H. Lyons

L.A. Powers Jr.

W.R. Luneburg Jr.

letters

Dear editor,

Thank you for the May 25th copy of your publication, and congratulations to Grumman with the honor bestowed on the late Leroy Grumman. It was about time. Leroy was truly a pioneer in aviation. My late husband, Robert, knew him well and was associated with him long before the birth of Grumman in Baldwin.

Our family enjoyed the good news.

Mary M. Berdon

Rogers moves into new West Coast office

Al Rogers, director of Grumman Aerospace's Marketing/Advanced Technology Development Office, is located in the new Grumman West Coast Office. The new address is at 5200 West Century Blvd., Suite 980, Los Angeles, California 90045. Rogers' telephone number is (213) 641-4291.

Carpools

Holbrook to Bethpage: interested in forming or joining car pool, hours 8 a.m. to 4:30 p.m. call Marilyn Duffy Ext. 57717

calendar

Aikido Club: (Martial Arts) every Wed., 5 p.m., Recreation bldg. Beginners class. Guests welcome. M. Brooks, Ext. 115-6171/H. Brondo, Ext. 52719.

Alcoholics Anonymous: every Mon., 4:30 p.m., Plant 15, conference room C, closed meetings; Personnel Relations, Ext. 3521. Great River meetings: every Wed., 4-5 p.m. T. Conley, Ext. 53521. Calverton: Chemical Dependency Discussion Group, every Mon., 4-5 p.m., Flt. Test Center, new conference meeting room, open meeting, Personnel, 369-6759/C. Robb, Ext. 117-7038.

Amateur Radio Club: every 3rd Wed. of the month. Meeting held in the white shack on top of Plant 5 by the blue ball, 5 p.m. B. Wengler, Ext. 50188.

Chess Club: every Fri., Recreation bldg., 5 to 11 p.m. Beginner to expert, guests welcome. K. Marley, Ext. 54901/N. Corso, Ext. 59600.

Coin Club: (Calverton) every Fri., noon lunch, Plant 6, A-6 Action Center conference room. Grumman employees welcome. N. Evangelides, Ext. 117-7242.

Computer Club: 1st Mon. of every month, Recreation bldg., 7 p.m. Computer discussion and demonstration/beginner to advanced programming. Guests welcome. J. Hayne, Ext. 54945/P. Frumkin, Ext. 55134.

Dance Club: every Wed., 5-8 p.m., Recreation bldg. Guests welcome, S. Koppell, Ext. 115-3800.

Duplicate Bridge Club: every Thur., Recreation bldg., 6 p.m. Guests welcome. P. Gill, Ext. 115-8414.

Equestrian Club: every weeknight, Knoll Farm, Brentwood, 6 p.m. Grumman employees and immediate family only. J. Eisenhower, Ext. 115-6211.

Fencing Club: every Wed., 4:45 — 6:30 p.m., Recreation bldg. Free instructions, guests welcome. J. Hayne, Ext. 54945/P. Chaldaris, Ext. 53486.

Folk Dancers Club: (Calverton) every Thurs., 2nd floor, Plant 6, lunchtime, Grumman employees only. J. Hamelman, Ext. 117-6835.

Klown Klub: every second Tues. of each month, Recreation bldg., 4:15 p.m. Guests welcome. M. Deyns, Ext. 57564.

Karate Club: every Tues. and Thurs., Recreation bldg., beginners 4:30 to 5:30, advanced 5:30 to 7:00 p.m., black belt instructors, physical and mental development. New students at the beginning of each month. Guests welcome. T. Ortiz, Ext. 58497.

Model Railroad Society: every Wed., 7 p.m., Recreation bldg., regular meeting. Guests welcome. R. Muntz, Ext. 56865.

Magic Club: last Wed. of every month, The Magic Shop, Mid-Island Plaza, Hicksville, 4:45 p.m. Guests welcome. M. Lichaw, Ext. 56114.

Roller Hockey Club: Meets every Wed., 6 p.m. For more information, employees can call Arnie Pritchett on Ext. 349-5081.

Roller Skating Club: every Thurs., Levittown Skating Rink, lessons at 6:30 to 7:30 p.m. Guests welcome. H. Denen, Ext. 52291.

Stamp Club: First three Wed. of every month, 5-6 p.m., Plant 35 cafeteria, trading sessions and discussions. S. Hoops, Ext. 53926.

Table Tennis: every Fri., Recreation bldg., 4 p.m., and on Sunday at 9 a.m. Open to all, both Grummanites and general public. Jim Pope, Ext. 53008.

Tap Dancing Club: every Mon., Recreation bldg., beginners 4:30 to 5:30 p.m.; Intermediate 5:30 - 6:30 p.m. Guests welcome. P. Tropea, Ext. 52260.

Grumman Toastmaster Club: every Wed., GHQ bldg., third floor conference room .A, 5 to 7 p.m. Grumman employees only. A. King, Ext. 56779/P. Ivy, Ext. 52931.

scorecard

Extra innings

What is thought to be the longest game ever in the history of Grumman intramural softball play took place on Tuesday, June 26 between defending 1983 league champions Jets and finalists Woodpeckers. Jet manager Marty Martinez and Woodpecker manager Bruce Armour said they checked with GRA's Herb Mahoney and the three concluded that the 16-inning game was the longest in 20 years of league play.

The Jets won the game to retain first place in the Tuesday night after-hours league by the score of 8 to 7, when catcher Lou Pizzo drove in shortstop Al Grillo from 2nd base in the top half of the 16th inning. The Jets then held the Woodpeckers scoreless in the bottom half of the 16th for a cumulative 11 shutout innings by Jet pitcher Joe Vosefski who did not give up a run after the fifth inning. The Jets nine starting players remained in the game for the entire 16 inning battle. The umpiring of the marathon game by Gerry Verrichio was complimented by managers and players of both teams.

Flower exhibit

The Grumman Garden Forum presented a rainbow of colors at the annual Rose and Seasonal Flower Show, held in the Plant 35 cafeteria on June 12. The show featured 231 entries — more than had been expected considering the cool temperatures and wet weather that gardeners were confronted with this past spring.

Vice President of Corporate Quality and Safety Operations Joe Kingfield presented awards to winners in 15 categories as well as for queen-of-show and best-in-show.

A real winner. *Amy Blackwell's white clematis won 'best-in-show' for seasonal flowers at the recent Garden Forum exhibit.*

Let's hear it for Chuck. *Vice President Joe Kingfield presents 'queen-of-show' award to Chuck Belensky (L) for his hybrid-tea rose called 'Bewitched.*

The 15 categories included single flowers and combinations.

Queen-of-show was awarded to Chuck Belensky, an Instrumentation group head in Plant 5, for his hybrid-tea single rose named "Bewitched." "I've been trying to win this award for about 20 years now, and it really feels good to finally have done it," says Chuck.

Amy Blackwell of Plant 5 took best-in-show honors for her beautiful, white clematis entry in the seasonal flower category. Amy, who grew the flower on an arbor over the walkway in her backyard, says this is the first time she has ever entered a clematis in the flower show, "so I was very happy to take the top prize for it," she noted.

The winners of the 15 categories (in order of placement) are:

Any medium red, dark red or orange: Belensky, Gus Preiser, Dot Kappenberg, Charles Chlanda.

Any light, medium or deep pink: Belensky, Ed Vasta, Blackwell, Preiser.

Any yellow, or yellow blend: Diedre Vitale, Ray Muntz, Roy Goddard.

Any pink blend or red blend: Mike Gabriel, Preiser, Blackwell, Goddard, Vasta.

Any white, mauve or other color: Preiser, Belensky, Gabriel, John Gatti.

Novice Class any color: Martin Schreck, Jo Monza, Vasta, Ellen Smith.

Roses-Sprays any color: Preiser, Blackwell, Judy Cote, Muntz.

Roses-Collection any 5-10 stems: Joan Nicholson, Vitale, Belensky, Blackwell.

Mini-roses, one bloom per stem any red or red blend, pink or pink blend: Blackwell, Belensky, John Dowd, Muntz.

Mini-roses, all other colors: Belensky, Blackwell.

Mini sprays, more than one bloom per stem: Belensky, Gabriel, Blackwell, Goddard.

Arrangements: George Rath, Betty McLean, Kappenberg

Arrangements, mini-roses or mini-seasonal material: Blackwell, Kappenberg.

Seasonal material: Blackwell, H. Fraser, Karl Hagen & Georgina Nurnberger, Ruth Wolf, Smith.

Seasonal material: Hagen, Muntz, Goddard, Kappenberg.

Theatre tix

The Grumman Theater Guild is now selling season tickets for its 1984-85 season. And the price for a theatrical entertainment is hard to beat. It's only $9 per person.

The Guild has three shows on tap: "Gypsy," "Tribute," and "No Sex Please, We're British." If you buy your tickets after September 22, the price goes up to $12.

For details, call Flo Varga, Ext. (111) 53152.

Courts open

The Grumman Racquetball Club has courts available at Unique Racquetball in Bethpage for Grummanites interested in competing during the summer months. Courts have been reserved for 5 p.m. on Tuesdays, Wednesdays and Thursdays. To reserve a court, call Unique at 822-5511 and specify a Grumman Club court. For more information about the club, contact Mark Sanders at mail/stop A08-106.

Stuart show

There were all kinds of plants and flowers at Stuart Operations' seventh annual Plant and Flower Show June 4-6. Bob Watkins, vice president and general manager of Stuart Operations (Fla.) presented awards to dozens of winners. Categories ranged from vegetables to roses to cacti.

The best in show award was presented to Jim Duncombe of Plant 77's Power Plant, for a beautiful bouquet of roses. Jim said, "I have 52 different types of roses in my backyard. I enjoy gardening, and besides it gives me something to do in the afternoon."

Jim won a ribbon and a $50 gift certificate for his best in show roses.

This is the second year that Jim entered the Plant and Flower Show. Last year, he came in second for best in show.

Other winners were:

Dish collection — Tony Danza (retiree), Ed Burkhead.

Hanging plants — Burkhead, Bob Waring.

Blooming potted plants — Bob Falkowski.

Potted plants — Judy Crespo, Augie Cappiello.

House plants/vines — Martha Bell, Joe Glemoski.

Vegetables — Falkowski (2).

Cut specimen — Falkowski (2).

Cut flowering specimen — Jim Duncombe (2).

Cacti — Bob Waring (2).

Succulents — Fabio Cortes, Duncombe.

Roses are No. 1. *Jim Duncombe (L) accepts top prize in Stuart Ops. Flower Show from Vice President Bob Watkins.*

A record number

retirees

On behalf of our fellow workers, PLANE NEWS salutes the following men and women for their contributions to the company and wishes them well in their retirement. Those who have recently retired are:

George W. Denue, Francis Oczko, Joseph B. Fasso, Christopher Mullins, Robert E. Boegel, Andrew Solomito, Charles V. Stanco, Pompea Sechrengost, Matthew Daniels, Naomi J. Adams, Robert L. Adams, Thomas C. Adee, Rudolph G. Aeder Jr., Joseph O. Albanese, James J. Albertson, William Alexander, Frank A. Alfano, Frederick G. Allen, Henry Allen, Robert J. Allen, Gerald R. Altmann, Ernest F. Ammirato, Pasquale J. Amoroso, Edward Andersen, Albert D. Anderson, Hobart N. Anderson, John W. Anderson, Mary F. Anesta, James L. Angell, Nicholas Apicella, Harold B. Appleton, Donald Archer, Galen D. Area, Frank Armanno, Marion A. Armanno, Edward J. Arola, Manuel Arroyo, Roy T. Arzberger, Leonard Ascosi, Harry Aufderheide, Walter R. Ayasse, Matthew Azoto, Frances Azzarello, Frank J. Azzarello, Cornelius W. Baan, Salvatore Baglieri, Clifton B. Bain, Webster N. Baker, Jr., Howard J. Baldwin, Donald T. Ball.

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rick A. Hughes, Mortimer J. Husted, Franklin J. Ibert, James Ingoglia, Thomas F. Iovine, Morris Isaac, Joseph M. Izzo, John J. Jace, Octave Jackovich, Charles Jackson, Early Jackson, Esaw Jackson, Joel Jackson, Lee J. Jackson, Luke Jackson, Miles E. Jacobson, Bruno Jakob, John C. James, Leroy T. Jaret, Leon Jasinski, Bernhard P. Jensen, Leo Jernick, Frank A. Johnson, Robert V. Johnson, Willie L. Jones.

Maurice L. Junod, Peter P. Jurich, Charles Kadluboski, Stephen Kalman, William H. Kammann, David Karpiloff, Thomas J. Keenan, Michael S. Keker, Edward Kellermann, John J. Kelly, Simon W. Kempf, Leonard Kenger, Richard A. Kennard, Michael Keravich, Edward R. Kern, George Ketcham, William S. Ketcham, Joseph C. Kelly, Rita Kiernan, John W. Kilborn, Kenneth R. Kinman, Stephen Kiss Jr., Peter Klechowski Jr., Valentine

(Continued on page 12)

An elite group

Two bucks and a Grumman career are all it takes to join the largest company-sponsored club. The Grumman Retiree Club makes its home base on Long Island, but there are also 13 chapters meeting monthly across the nation.

If you are interested in joining this elite group, contact Ellen Drasser of Recreation, (516) 575-2133/2269. You can drop her a line at Grumman Aerospace Corp., A01-28A, Bethpage, NY 11714.

A listing of off Long Island chapters can be found on this page and on page 12.

New chapter

New England North
Al Capra,
RFD 3, Dean Ave.,
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(603) 223-8597

Naval note. *Capt. Ray Mur (R), USNR (Ret.), was recently honored by the Naval Reserve Association for his 39 years of dedicated service. Mur is vice president and general counsel of Grumman Aerospace. Presenting the award to Mur is Capt. Vincent DeVito, who also works at Grumman Aerospace.*

retirees

(Continued from page 11)

F. Klein, John Klimek, William R. Klingler, Wilbur G. Klos, John D. Kochner, Henry L. Koehler, Robert T. Koepper, George A. Kovanko, John A. Kruger, Charles P. Kulik, Mary Kulkiewicz, Leonard Kurke, Mary LaSalle, John E. Lacina, Henry W. Lada, James L. Lagerstedt, Richard V. Lambert, Warren M. Lane, John Lapinski, Ernest Larsen, Forrest E. Laux, Francis A. Law, Edward J. Lowlor, Peter N. Layton, Anthony F. Lazarek, Alfio Lazzaro, Bruno E. Lehtila, Robert M. Leighton, John B. Lennon, John B. Leonard, Robert J. Leonhardt.

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Victor H. Martorana, Richard D. Mase, Joseph A. Massa, Alphonse Massucci, Alexander Matthes, Herbert Matthews Jr., Godfrey E. Mattson, Jasper Mauceri, George Maxwell, Donald J. Mayer, Jimmy E. Mazzola, John B. McCaffery, James McClelland, Arthur McCrum Jr., John E. McDonnell, John H. McDonnell, John M. McGarry, Christopher McKenna, Eileen I. McKenna, John E. McLean Jr., Elizabeth McLean, Edward A. McNally, Julia M. McNally, Henry R. McNamara, Robert D. McNiff, Alice McPhillips, John S. Meagher, Robert R. Meardon, Belle Melito, Nat P. Menna, Melvin C. Merkle, Jack Messina, Joseph A. Metro, Kenneth J. Metz, Stanley Mias, Larry Micalizzi Sr., George J. Michael, John F. Michel, Walter Michocki, William Middleton, John J. Mikals, Anthony Milauckas, Carrie L. Miles, Joseph Miley, George Milione Jr., Gustave A. Miller, Edward H. Mills, Edward A. Minder, Mildred A. Mitchell, William J. Moloney, Daniel A. Moore, Angel L. Morales.

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